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| EXAMINER | |
|---|---|
| MILLER, MARINA I | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1631 | |

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/773,767 | MANDEMA ET AL. | |
| | Examiner | Art Unit | |
| | Marina Miller | 1631 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *50-77* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *50-77* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/23/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

Applicants' submission filed on 9/18/2006 is acknowledged.

Claims 50-77 are pending.

Claims 1-49 are cancelled.

Claims 50-77 presently are under examination.

Applicants' arguments have been fully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are applied.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Priority*

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date, U.S. provisional application 60/511,602 filed 10/14/2003 under 35 U.S.C. 119(e) for claims 50-77. Claims 50-77 are essentially the same as cancelled claims 1-28 and are drawn to a method and a system for representing performance of a drug candidate comprising steps of receiving raw data, extracting index information, referencing information to generate a metadata file, referencing the metadata file to convert raw data into a binary file, generating a user interface comprising a menu, presenting the menu to a user, receiving a user input, causing the interface to reference and identify a subset of the binary file, and presenting the data subset. The steps of referencing information to generate a metadata file, referencing the metadata file to convert raw data into a binary file, and causing the interface to reference and

identify a subset of the binary file are not supported by the provisional application 60/511,602, as set forth in the previous office action.

If applicant desires benefit of these provisional applications, applicant is invited to point to specific support by page and line number for each limitation of instant claims in the provisional application mentioned above. Priority for claims 50-77 is granted only to the filing date of the instant application filed 02/06/2004.

***Information Disclosure Statement***

The Information Disclosure Statement (IDS) filed 9/23/2005 has been considered in full.

***Claim Rejections - 35 USC § 101***

***Lack of Utility***

Claims 50-77 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility.

Claims 50-77 recite similar limitations as those recited in cancelled claims 1-28, and are thus rejected for the same reasons as thos previously set forth for claims 1-28. Claims 1-28 were rejected for lack of patentable utility in the office action mailed 8/26/2005. Applicants argue that the instant specification "unequivocally express[es] the utility achieved by the claimed embodiment" and refer to paragraph [0126].

Paragraph [0126] discloses that "the original structure of the model may be readily discerned from the simulated data." The alleged utility does not commensurate with the claimed invention because instant claims 50-77 do not recite "simulated data" or an "original structure of the model." Claim 50 only recites manipulations of raw data, which are obtained by a model of

drug behavior, and does not recite development or generation of the model or refer to the model in any other context. The specification does disclose that there is a need in the art for systems for modeling the behavior of drug candidates wherein different knowledge is used for developing a model of compounds' clinical safety, tolerability, and efficacy profile in relation to the compounds' competitors. The specification further discloses that knowledge contained in those models is broadly accessible to the clinical development organization. The specification also states on p. 7-8 that Drug Model Explorer software may be utilized to facilitate decision-making regarding clinical development programs for particular drugs. The model disclosed in the SPECIFICATION has a well-established utility (*i.e.*, models for predicting drug behavior; *e.g.*, a pharmacokinetic or pharmacodynamic model (PK/PD) have a well established utility). However, the CLAIMS do not recite making such a model; they only recite statistical manipulation of data generated by "a model," as set forth above. The data in the CLAIMS is only limited to be that from a model of drug candidate behavior; it is not limited to be, for example, PK/PD data, flux balance analysis type of data, binding data (*e.g.*, to a receptor or antibody), or any other specific type of data. The claims only recite that SOME of the data identifies LOCATIONS of treatment. As the claims do not limit any other data in the metafiles and do not recite any limitations with regard to data in the binary files, the output of a "subset" does not provide an "immediate benefit" to the user. Further, the "result" of the claimed method is presenting a subset of a binary file relevant to a user-selected input wherein the binary file is obtained by conversion of raw data generated by a drug candidate behavior model, as set forth in the pervious office action. In order for the result of the method (*i.e.*, a data subset of a binary file) to be used, *e.g.*, for decision-making regarding clinical development of a drug candidate, one skilled in the art must be aware

of some correlation between the information received (a subset of data) and a condition or disease for which the drug is selected, or between the model output (*e.g.*, drug behavior) and condition, disease, *etc*. Absent any recited correlation between the data recited in the claims, the drug under evaluation, and some disorder/disease to be treated, the asserted utility is not specific. No such information is recited in the instant claims; further research would be required to determine such a correlation. Applicant is reminded that a "use" to perform further research is not a utility under 35 U.S.C. 101.

For the reasons set forth above and in the previous office action, the invention lacks a specific and substantial utility, and therefore lacks a patentable utility.

***Claim Rejections - 35 USC § 112***

***Enablement***

Claims 50-77 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

***Second Paragraph***

Claims 55-77 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 50 recites the limitation "raw data generated by a model." It is not clear whether "generation" of raw data is intended to be an active, positive method step or whether applicant intends to limit the data itself. If the latter, then it is further unclear what limitation of the data is intended by limiting its origin.

Applicants argue that raw data need not necessarily be generated. However, it is still not clear whether the claimed method comprises an active, positive step of generating or what, if any, limitation of the data is intended. As the intended limitation is not clear, claims 50-74 are indefinite.

Claims 50 recites a metadata file "explicitly reflecting a hierarchical structure model." The limitation "explicitly reflecting" is not clear and neither the claims nor the specification defines the limitation.

Applicants argue that the limitation is amply described throughout the specification, *e.g.*, paragraphs [0121] and [0124] and fig. 10B. However, paragraph [0124] only discloses that "[t]he data structure implicitly imparted to file 1004 by the hierarchical model organization, is thus transformed into an explicit, ordered XML tree structure." Thus, the specification does not define the limitation of a metadata file "explicitly reflecting a hierarchical structure model." Specifically, it is unclear what limitation of a data file is intended by limiting it to "explicitly reflect" a MODEL. If applicant intends that the metadata in the file be in a hierarchical order, or intends the metadata file to be the result of a hierarchical structure model, then the claims should be amended to clearly reflect applicant's intended limitation. The examiner maintains that the limitation is still indefinite, and therefore claims 50-74 are indefinite.

Claim 50 recites the limitation "referencing" index information and metadata. It is not clear what steps are actually intended and whether "referencing" is intended to mean using, referring, generating, or linking, *etc.* or, as defined by Merriam-Webster Dictionary: citing, supplying with a reference, or putting in form adapted to easy reference. Claim 50 recites the limitation "causing the interface to reference the metadata file." It is further unclear whether "to reference" is intended to be an active, positive method step of the method and whether "referencing" the metadata is intended to mean to inquire, link, use, refer, *etc.* Specific criteria/steps of "causing … to reference" are also not clear, and neither the specification nor the claims defines the limitation.

Applicants argue that the specification amply discloses "referencing," *e.g.*, fig. 10B and paragraph [0124]. However, paragraph [0124] nether discloses nor defines "referencing". Therefore, the limitation is still not clear, and claims 50-74 are indefinite.

Claim 50 recites referencing index information "to generate a metadata file." It is not clear whether "generation" of the file is intended to be an active, positive method step. As the intended limitation is not clear, claims 50-74 are indefinite.

Claim 50 recites the limitation referencing a metadata file "to convert the raw data." It is not clear whether "conversion" is intended to be an active, positive method step. As the intended limitation is not clear, claims 50-74 are indefinite.

Claim 50 recites the limitation of identifying "locations" of treatment scenario information types. It is not clear whether this means physical location (a hospital or clinic) or site

of administration of a treatment (arm, leg) or some other "location". As the intended limitation is not clear, claims 50-74 are indefinite.

Claims 50 and 75 recite the limitation "to identify a subset." It is not clear whether "identifying" is intended be an active, positive method step or merely an intended use of the method. As the intended limitation is not clear, claims 50-74 are indefinite. As the limitation is not clear, and claims 50-77 are indefinite.

Claims 50 and 75 recite a binary file "relevant" to a user-selection. The metes and bounds of the "relevancy" of a binary file to a user selection are not clear. One skilled in the art would not know specific criteria for determining whether a binary file is "relevant" to a user-selection and neither claims nor the specification define establishing relationships between a user-selection and a binary file.

Applicants argue that the specification contains discussion of the limitation, *e.g.*, fig. 9 and paragraphs [0108]-[0109]. However, the cited paragraphs neither disclose nor define the "relevancy" criteria. Therefore, the limitation is still not clear, and claims 50-77 are indefinite.

Claim 75 recites the limitation "to reference" metadata. It is not clear whether "reference" metadata is intended to mean inquire, link, use, refer, *etc.*, as set forth above. As the intended limitation is not clear, claims 75-77 are indefinite.

***Claim Rejections - 35 USC § 103***

Claims 50-54, 62-71, 73-75, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fink, U.S. Patent 5,808,918, in view of Watkins, U.S. Patent 6,457,017.

Fink discloses a method and a system for modeling biological systems and disease processes. Fink's invention provides an interactive tool to help identify new drug targets (col. 3, line 7-23; col. 7, line 34-38). Fink discloses building a model based on knowledge from literature, books, experiments, internal information, clinical trials, *etc.* (col. 7, line 40-67) and using the model to generate raw data (col. 12-13, *Model Uses*). Fink discloses obtaining raw data comprising index information (fig. B; col. 9, line 5-14; col. 12, line 58-67), treatment scenario (col. 12, line 58-67; col. 13, line 30-33), and output performance information type (*e.g.*, effect on the immune system, col. 12, line 52-57). Fink discloses extracting index information from raw data (fig. 3 and col. 12-13, bridging paragraph). Fink discloses generating a user interface wherein a user may input his selection of data and "interact" with a model (col. 5, line 48 – col. 6, line 3; col. 6, line 62-67). Fink discloses presenting a menu to a user (*see* fig. 3 and col. 5, line 48-65). Fink discloses receiving a user input at the interface (col. 5, line 48-65; col. 12, line 49-50; col. 13, line 27-36). Fink discloses hierarchical structure of the model (col. 4, line 37-57; col. 10, line 1-23) wherein fundamental model units represent relevant biological information and processes at each level. Fink discloses that output is obtained according to a user selection (input) and presented as a data subset in a graphic user interface (col. 5, line 57 – col. 6, line 3; col. 13, line 26-34). Fink discloses data representing clinical effect (col. 12, *Model Uses*). Fink discloses an independent variable required for a clinical effect (*e.g.*, bacterial load, col. 12, line 46-57). Fink discloses a probability of distribution (col. 9, line 9-32). Fink discloses input

uncontrollable variables (family history, patient is a smoker) (col. 13, line 26-30). Fink discloses controllable variables (treatment regimen, col. 13, line 32-34). Fink discloses endpoint based on a clinical measured value (col. 13, line 32-34). Fink discloses that uncontrollable variables comprise a model assumption (using model for particular patients), col. 13, line 26-37. Fink also discloses a system for executing his method because it is a computer method (fig. 9 and col. 13).

Fink does not disclose metadata files, binary files, and converting raw data onto a binary file by referencing a metadata file.

Watkins discloses an information management system. Watkins' system has an object-oriented architecture over a relational database in order to manage files of information wherein files are indexed and can be retrieved (*see* abstract). Watkins discloses a graphical user interface for displaying files content to a user (col. 11-12, *User Interface*). Watkins discloses that raw data are indexed and stored in a database and converted to a specified type of data by the system to a human-readable form (col. 8-9, bridging paragraph). Watkins discloses that all stored raw data are associated with metadata and are transformed into binary files (col. 13-14). Watkins discloses that raw data comprises files organized according to explicit index (data are associated with an object; metadata stores a basic object attribute, (col. 12-13, bridging paragraph; col. 9, *Database Tables*). Watkins discloses querying a database by a user wherein metadata is stored in a database (col. 14, line 39-41). Watkins discloses raw data comprising multiple files and raw data converted into a single binary file and multiple binary files (*see* col. 13). Watkins discloses a menu comprising text form from metadata file (col. 13 and fig. 13-16). Watson discloses a tree-structured data (*e.g.*, multiple versions of hierarchy (configuration management), a parent-child database) (col. 9, line 64 – col. 10. line 32).

It would have been obvious to one skilled in the art at the time of the invention to modify the method and the system of Fink to use metadata files and binary files and reference metadata to convert raw data into a binary file, such as taught by Watkins, where the motivation would have been to improve selecting and viewing data, as taught by Watkins, col. 1, line 10-32 and col. 13, line 1-62."

*Answer to Arguments*

Applicants argue that Fink does not teach creating "from raw data output from the model, a metadata file reflecting the model structure." Applicants argue that Fink teaches away from the instant invention because Fink emphasizes the role played by experts. Applicants further argue that Watkins does not teach "management of information generated by a complex modeling, never mind modeling of drug behavior." Applicants also argue that Watkins fails to teach generating a metadata file from raw data index information in order to reflect a structure of the model responsible for producing the raw data. Applicants argue that there is no motivation to combine the references.

Applicants are reminded that the rejection is made under 35 U.S.C. 103(a) over a combination of references.

In response, it is noted that although Fink does not disclose metadata files, binary files, and converting raw data onto a binary file by referencing a metadata file, Watkins does disclose those limitations, as set forth in the previous office action. Further, although Fink discloses delivering a model to a user for examination by experts, Finks discloses that modifications suggested by the experts are made only by checking the clinical outputs of the model "as opposed to all of the various cell populations and chemical levels" and the modifications by the

experts are made *only* if desirable and possible (col. 11, lines 57-64). Moreover, the instant claims do not recite delivering or not delivering a model to an expert for validation or modification. Therefore, the examiner maintains that Fink does not teach away from the instant invention.

With respect to the reference by Watkins, it is noted that although Watkins does not disclose modeling drug behavior, Fink teaches modeling for identifying a new target for drug development or a clinical trial for an existing drug, as set forth in the previous office action. Also, Watkins does teach that raw data are indexed and stored in a database and converted to a specified type of data by the system to a human-readable form (col. 8-9, bridging paragraph). Watkins discloses that all stored raw data are associated with metadata and are transformed into binary files (col. 13-14). Watkins discloses that raw data comprises files organized according to an explicit index (data are associated with an object; metadata stores a basic object attribute, (col. 12-13, bridging paragraph; col. 9, *Database Tables*). Watkins discloses querying a database by a user wherein metadata is stored in a database (col. 14, line 39-41).

Motivation to combine the teachings of Fink and Watkins is provided above.

Thus, the examiner maintains that Fink and Watkins disclose the limitations recited in claims 50-54, 62-71, 73-75, and 77, and therefore the rejection is deemed proper and is maintained.

Claims 50-51, 53-71, 73-75, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herren, U.S. Patent 6,108,635, in view of Watkins, U.S. Patent 6,457,017.

Herren discloses an integrated disease information system and a method for developing new therapies. The method comprises steps of receiving raw data generated by a model (col. 7, line 64-67; col. 18-19 table 3), extracting index information (claim 1), generating a graphical user interface (col. 5, line 56-62 and fig. 9, 12-14), presenting a menu to a user (fig. 9, 12, 13-14), receiving a use selection (claim 1), identifying a subset of data relevant to the user selection and presenting data (claims 1-2 and fig. 9, 12-14). Herren discloses subsets representing a clinical effect (claims 1-2). Herren discloses independent variables (col. 19, line 15-36). Herren discloses independent variables required for a clinical effect (col. 26, 48-60 and fig. 8-9). Herren discloses table, matrix of tables, plot, and matrix of plots presentation formats (fig. 9, 12-13, 16-18). Herren discloses a contrast between a drug candidate and its competitor (*e.g.*, a standard, fig. 13). Herren discloses data representing contrast between output corresponding to two controllable variable input scenarios and specifically where the contrast is a difference. (col. 27, line 5-15; fig. 9; col. 22, line 28-47). Specifically, Heren discloses comparing a proposed intervention with a standard intervention (col. 8, line 2-24; col.4, line 22-41). Herren discloses input selected from an endpoint, a controllable variable, and uncontrollable variable (col. 19, line 15-36 and col. 22, line 32-47; col. 30, line 60-64). Herren discloses an uncontrollable variable comprises a model assumption (col. 7, line 64 – col. 8, line 2). Herren discloses a system for performing his method (fig. 1-2).

Herren does not disclose metadata files, binary files, and converting raw data onto a binary file by referencing a metadata file.

Watkins discloses an information management system. Watkins' system has an object-oriented architecture over a relational database in order to manage files of information wherein

files are indexed and can be retrieved (*see* abstract). Watkins discloses a graphical user interface for displaying files content to a user (col. 11-12, *User Interface*). Watkins discloses that raw data are indexed and stored in a database and converted to a specified type of data by the system to a human-readable form (col. 8-9, bridging paragraph). Watkins discloses that all stored raw data are associated with metadata and are transformed into binary files (col. 13-14). Watkins discloses querying a database by a user wherein metadata is stored in a database (col. 14, line 39-41). Watkins discloses raw data comprising multiple files and raw data converted into a single binary file and multiple binary files (*see* col. 13). Watkins discloses a menu comprising text form from metadata file (col. 13 and fig. 13-16). Watson discloses a tree-structured data (*e.g.*, multiple versions of hierarchy (configuration management), a parent-child database) (col. 9, line 64 – col. 10. line 32).

It would have been obvious to one skilled in the art at the time of the invention to modify the method and the system of Herren to use metadata files and binary files and reference metadata to convert raw data into a binary file, such as taught by Watkins, where the motivation would have been to improve selecting and viewing data, as taught by Watkins, col. 1, line 10-32 and col. 13, line 1-62.

*Answer to Arguments*

Applicants argue that Herren does not teach generating from raw, a metadata reflecting a model structure. Applicants also argue that Herren does not disclose using a model without assistance of an expert. Applicants argue that there is no motivation to combine the references.

In response, it is noted that although Herren does not disclose converting raw data onto a binary file by referencing a metadata file, Watkins does disclose those limitations. Also, the instant claims do not recite using a model without assistance of experts.

Motivation to combine the teachings of Fink and Watkins is provided above.

Thus, the examiner maintains that Herren and Watkins disclose the limitations recited in claims 50-51, 53-71, 73-75, and 77, and therefore the rejection is deemed proper and is maintained.

Claims 72 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herren, U.S. Patent 6,108,635, in view of Watkins, U.S. Patent 6,457,017, as applied to claims 50-51, 53-71, 73-75, and 77 above, and in view of Redlich, US 2005/0138110.

Herren and Watkins make obvious the method and the system of claims 50-51, 53-71, 73-75, and 77, as set forth above.

Herren and Watkins do not discloses binary files with n-dimensional structure.

Redlich discloses a method and a computer system for processing and securing data. Redlich discloses graphical user interface and "interaction" between stored information and a user (*see* [0092], [0347-35], [0404-0407]). Content data (raw data) are connected to metadata [0350], and metadata define a content of binary files [0092]. Object information and metadata are encoded in an ordered tree structure (hierarchy structure) with root, branch, and leaf components [0092]. An object hierarchy structure is described as a binary tree, category structure, or hive (n-dimensional structure) [0405].

It would have been obvious to one skilled in the art at the time of the invention to modify the method and the system of Herren and Watkins to use n-dimensional binary files, such as taught by Redlich, where the motivation would have been to improve data coding, storage, formatting, and presentation, as taught by Redlich, [0350], [0405] and [0092].

***Conclusion***

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Miller whose telephone number is (571)272-6101. The examiner can normally be reached on 8-6, M-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang, Ph. D. can be reached on (571)272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marina Miller
Examiner
Art Unit 1631

MM

Marjorie A. Moran
Primary Examiner

Marjorie A. Moran
11/27/06